



**NOAA**

**Satellite and  
Information  
Service**

2017

# National Environmental Satellite, Data, and Information Service (NESDIS)

Ajay Mehta, Deputy Director  
Joint Polar Satellite System



# NOAA's Role in National Space Policy



## Civil Space Sector

## Defense Space Sector



Focus on Earth system research	Focus on weather and space weather observations and applications	Focus on land remote observations and land use applications	Focus on intelligence gathering and weather and environmental applications to support military operations
Usually no more than one satellite per new research area. No backup satellites and less demanding reliability requirements	Operational, continuous missions. 2-4 satellites per block purchase, spares on ground or in space	Operational, continuous missions – utilizing capabilities provided by NASA (Landsat series)	Operational, continuous missions – block purchase of satellites, spares on ground or in space
Large, changing array of research observations dictated by national research priorities	Core set of observational requirements, with requirements increasing in response to operational needs		Core set of observational requirements, increasing in response to operational needs
Partners with both NOAA and USGS to leverage satellite building expertise	History of relying on NASA for space segment development		Independent space and ground segment development capability

NOAA Satellite & Information Service: National Environmental Satellite, Data, & Information Service (NESDIS)





# NESDIS Mission and Vision



## OUR MISSION

NESDIS' mission is provide secure and timely access to global environmental data and information from satellites and other sources to both promote and protect the Nation's environment, security, economy quality of life.

## OUR VISION

Our vision is to expand understanding of our dynamic planet as the Trusted source of Environmental data.



# NESDIS Strategic Plan

## Commitments

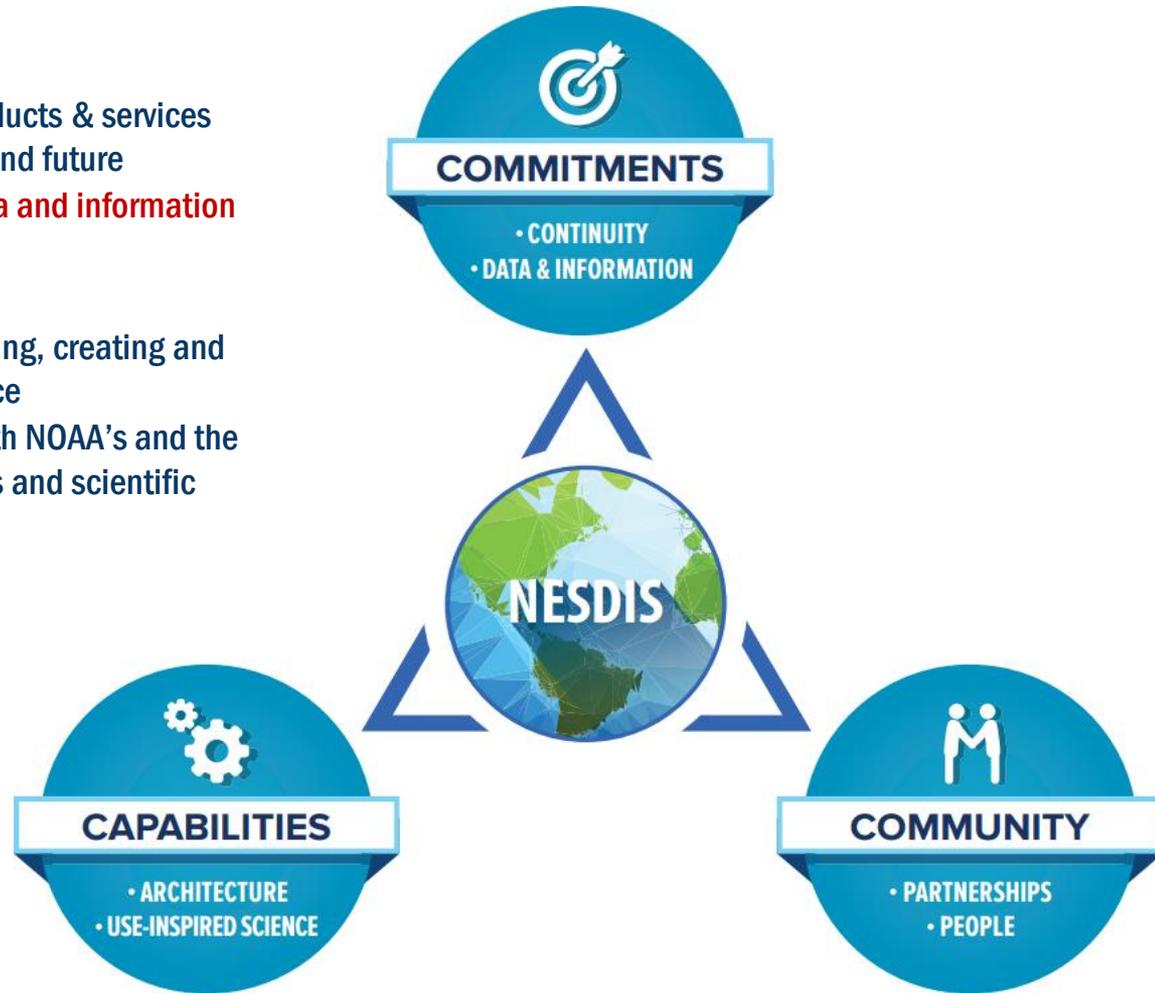
- ✔ Enduring focus on **continuity** of products & services delivered by NOAA – past, present and future
- ✔ Dedication to, and expertise in, **data and information**

## Community

- ✔ **People:** NESDIS will focus on retaining, creating and developing an agile, expert workforce
- ✔ Through **partnerships**, maximize both NOAA's and the Nation's value through observations and scientific capabilities

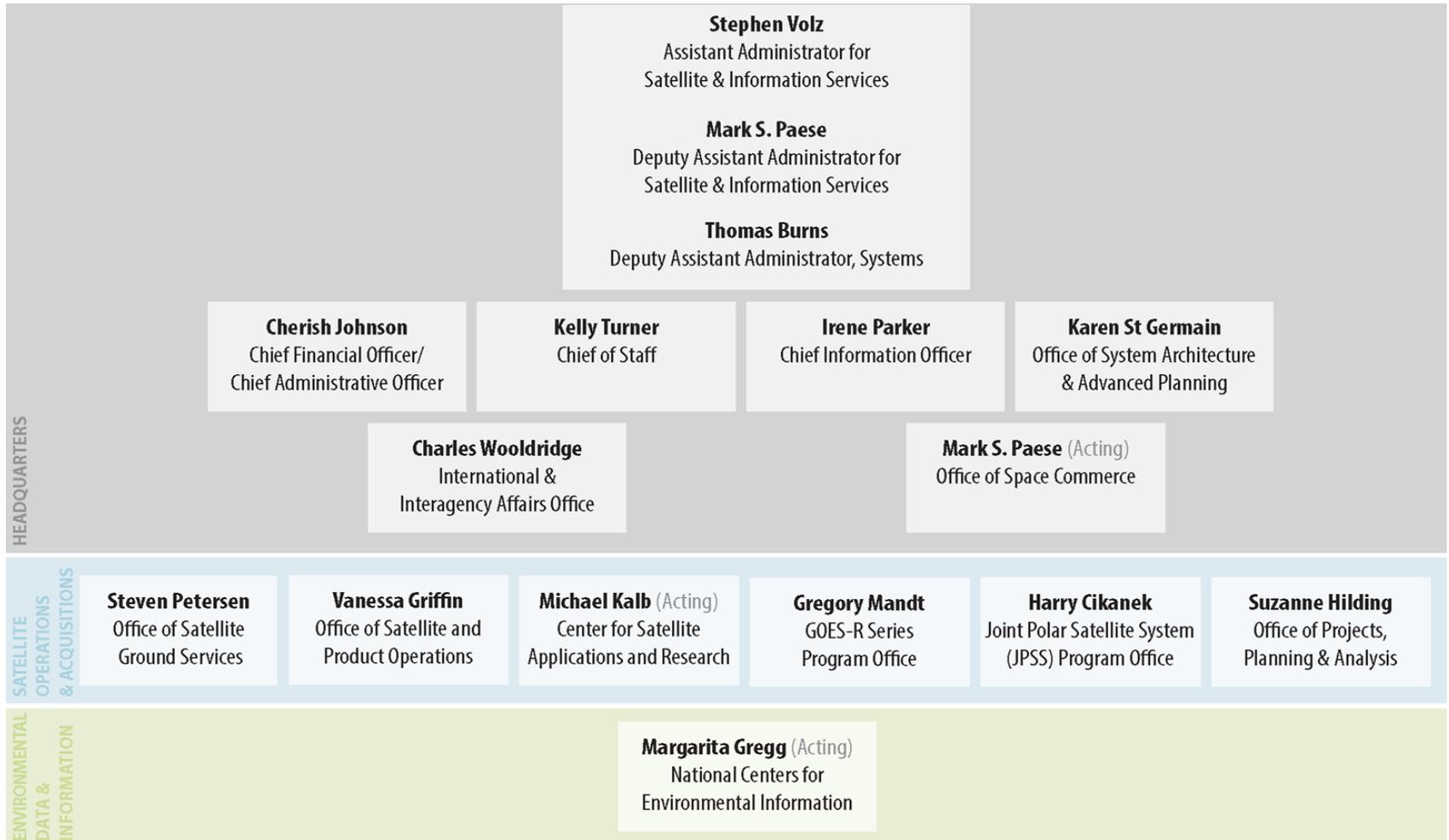
## Capabilities

- ✔ Importance of considering, analyzing and planning an integrated observing system **architecture**
- ✔ Delivering ever-increasing value, including new and better information products and services, through **science**





# NESDIS Organization



Revised: 08/18/2016





# NESDIS Principal Activities

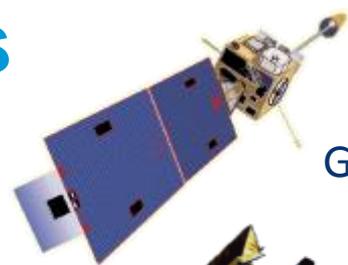
Providing on-orbit satellite operations

Acquiring next-generation satellites

Provide data processing and operational product distribution

Use-inspired product development

Providing long-term data stewardship and short, mid, and long term environmental assessments



GOES

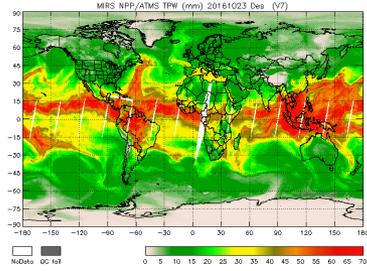


POES



GOES-R

JPSS



ATMS Total Precipitable Water Product





# NESDIS Locations

## Cooperative Institutes

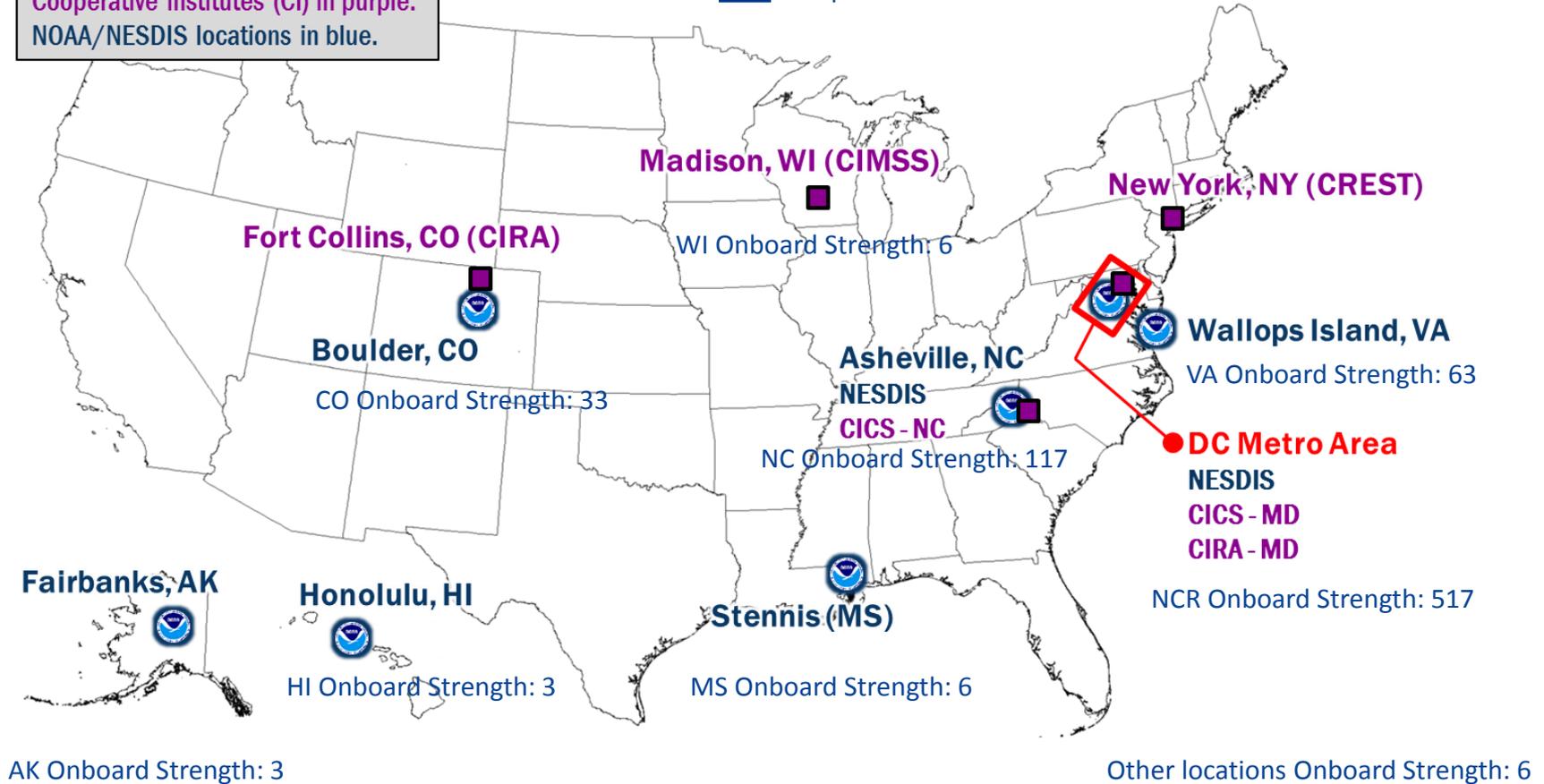
**CIRA:** Cooperative Institute for Research in the Atmosphere

**CIMSS:** Cooperative Institute for Meteorological Satellite Studies

**CREST:** Cooperative Remote Sensing Science and Technology Center

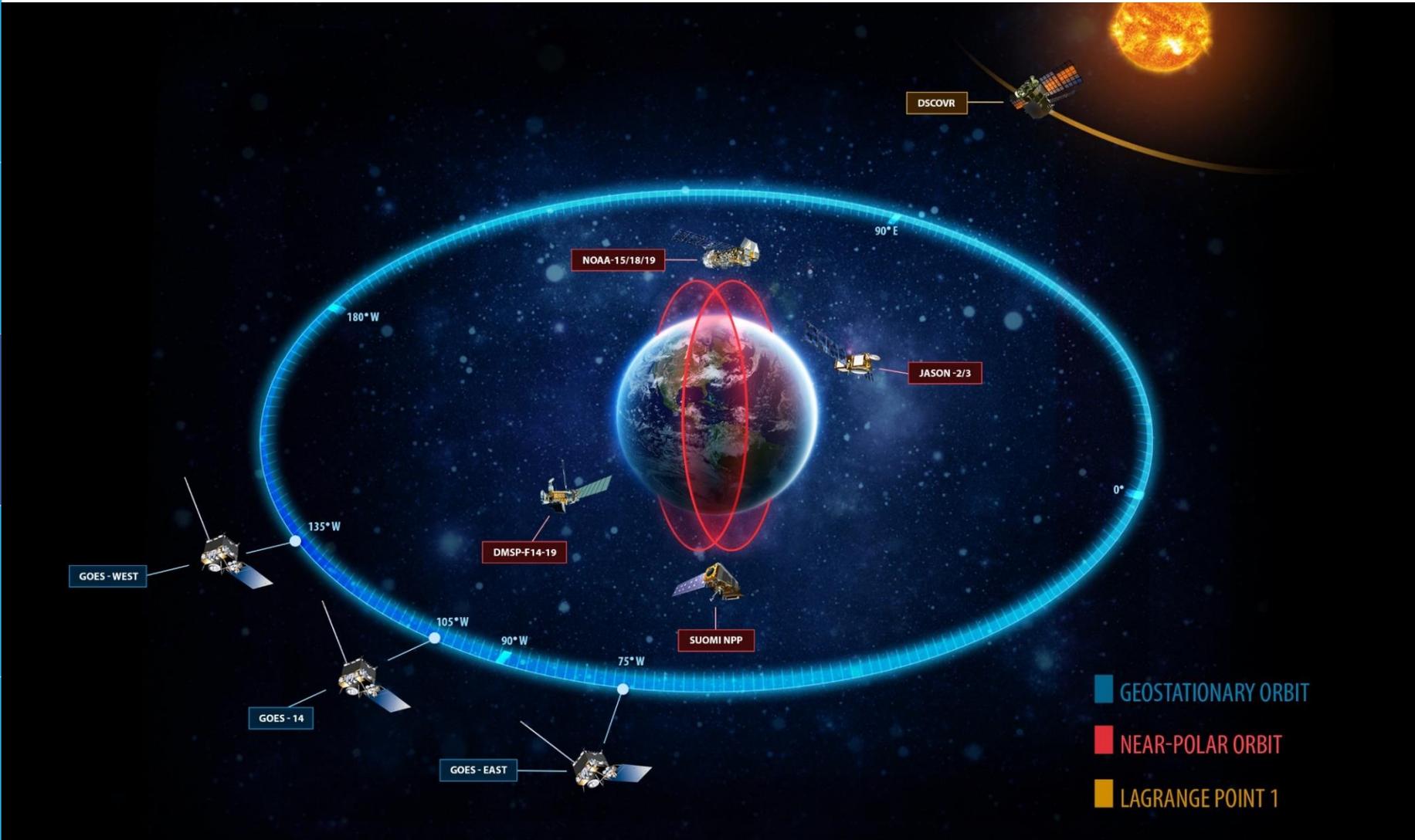
**CICS:** Cooperative Institute for Climate and Satellites

Cooperative institutes (CI) in purple.  
NOAA/NESDIS locations in blue.





# Current NOAA Constellation





# NESDIS Recent and Upcoming Launches



**JASON-3**  
OPERATIONAL JULY 1, 2016

**DSCOVR**  
OPERATIONAL JULY 27, 2016

**COSMIC-2**  
COSMIC-2A - 2017  
COSMIC-2B - 2020

**GOES-R SERIES**  
GOES-16 - LAUNCHED NOVEMBER 19, 2016  
GOES-S - 2018  
GOES-T - 2019  
GOES-U - 2025

**JPSS SERIES**  
JPSS-1 - 2017  
JPSS-2 - 2021  
JPSS-3 - 2026  
JPSS-4 - 2031



